

SBOH school environmental health rule review draft notes **20 February 2003**

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On January 8, 2003 the State Board of Health requested that Board staff prepare and submit a rule review document to the Board by July 2003 that includes the following elements:

1. Review of WAC 246-366 with respect to results achieved and outcome measures.

Everett School District's Indoor Air Quality Program has established thermal and IAQ performance criteria for school facilities that can be used as outcome measures for achieving WAC 246-366 ventilation, heating, and temperature controls. (ESD's IAQ Program manual available at http://www.doh.wa.gov/sboh/Meetings%202002/2002-10_09/Tab12_GJefferisIAQP.pdf)

The EPA IAQ Tools for Schools materials include standards and guidelines for typical indoor air pollutants (IAQ Coordinator's Guide, Appendix E, available at <http://www.epa.gov/iaq/schools/tools4s2.html>).

The Government of Hong Kong's Architectural Services Department has proposed "Recommended IAQ Objectives for Office Buildings and Public Places in Hong Kong" that include CO₂, CO, Formaldehyde, total VOCs, airborne bacteria, temperature, relative humidity, and other parameters. (See http://www.chps.net/info/iaq_papers/PaperIX.1.pdf.)

Maximum sound levels are listed in WAC 246-366-110 and minimum light intensities listed in WAC 246-366-120.

- ⇒ What specific results and measurable outcomes do you recommend including in rule, or including in guidance?
- ⇒ How useful is the DOH-OSPI K-12 Health and Safety Guide?
Can it be made more useful in achieving results and providing outcome measures? How?
Should elements of the guide be included in rule?
Should the guide be references in rule (two people have recommended this)?

2. Review of WAC 246-366 and other relevant rules with respect to identification of a responsible party during construction and capital improvement projects.

WAC 246-366 does not identify responsible parties during construction and capital improvement projects. Before construction, boards of education are responsible for obtaining health officer site approval and plan reviews and recommendations. After construction, health officers are responsible for preoccupancy inspection to determine its conformity with the approved plans and specifications.

The Attorney General of Washington recommended in 1996 that:

- SPI should establish a single entity responsible for monitoring architects' compliance with school construction plan revisions and to serve as a clearinghouse for all agencies involved in inspecting school facilities
- School districts hire an experienced owner's project representative to remain on-site during construction and capital improvement projects, and for 3-6 months after construction is finished
(see http://www.wa.gov/ago/pubs/construction/report_construct.html).

These recommendations were received by SBOH staff from a concerned parent.

⇒ What are other relevant rules?

3. The appropriateness and practicality of plan review requirements and the pre-occupancy review process for new school construction or for school remodeling projects.

Plan review requirements and pre-occupancy review processes seem to be appropriate and practical for the LHDs who have the capacity to do them adequately. They may not be appropriate and practical for those LHDs without adequately trained staff.

There seems to be variation in how practical and appropriate the plan review requirements and pre-occupancy review processes are to school districts.

⇒ What would make WAC 246-366 plan review requirements and pre-occupancy review processes more practical and appropriate to both the LHDs and the SDs?

4. The presence and usefulness of communication criteria related to health related school closures and remediation actions.

Communication criteria are not included in WAC 246-366. They are vital to successful management of school environmental health issues, however, as illustrated by information submitted by Public Health-Seattle & King County staff and by Kittitas County Health Department staff. Public testimony received by the state board of health on school indoor air quality concerns recommended

improved communication between government agencies and communities (teachers, students, parents).

EPA's Tools for Schools kit includes communication recommendations (available at <http://www.epa.gov/iaq/schools/tools4s2.html>).

SBOH staff interviews of 4 SD and 4 LHD staff found that criteria for health related school closures varied, as did methods for communicating these criteria and decisions. SD staff recommended that SDs should develop and implement communication plans, and LHD staff recommended improving interagency communication. Both recommended better communication with the public regarding responses to EH concerns, early on in the process.

Existing RCWs give school boards of directors and the superintendent of public instruction authority to develop communication criteria, but don't specifically refer to communication criteria for health related school closures and remediation actions:

RCW 28A.320.015 gives school boards of directors the authority to "promote the effective, efficient, or safe management and operation of the school district."

RCW 28A.300.040 gives the superintendent of public instruction authority to "have supervision over all matters pertaining to the public schools of the state."

RCW 28A.320.125 requires the superintendent of public instruction, in consultation with many others, to "provide guidance to school districts in developing comprehensive safe school plans for each school." The guidance shall include a comprehensive school safety checklist.

RCW 28A.335.020 requires school district boards of directors to "adopt a policy regarding school closures which provides for citizen involvement before the school district board of directors considers the closure of any school for instructional purposes."

SPI and school district superintendents and board are involved in determining school closures and allocation of funds (WAC 392-129-100 through 150). SDs must communicate specific information to the SPI:

WAC 392-129-140 School emergency closure -- School district application to the superintendent of public instruction. A school district applying for continuation of state support during a school emergency closure will submit the following information:

- (1) The name of the school district;
- (2) The name of the superintendent of the school district;
- (3) A statement signed by the superintendent that the school district board of directors has reviewed the application and supports its submittal;
- (4) The name(s) of the individual schools which did not operate;

- (5) The unforeseen natural events, mechanical failures, or actions or inactions by one or more persons which caused the school emergency closure;
- (6) The specific dates of the school emergency closure; and
- (7) The specific dates that the school district has scheduled to make up the lost days.

WAC 392-129-090 Definition -- District-wide emergency closure. As used in this chapter, "district-wide emergency closure" means that all school buildings in the school district are unsafe, unhealthy, inaccessible, or inoperable due to one or more unforeseen natural events, mechanical failures, or actions or inactions by one or more persons.

WAC 392-129-100 Definition -- School emergency closure. As used in this chapter, "school emergency closure" means a school in the school district comprised of more than one school that is unsafe, unhealthy, inaccessible, or inoperable due to one or more unforeseen natural events, mechanical failures, or actions or inactions by one or more persons.

- ⇒ Are there specific references to communication criteria related to health related school closures and remediation actions in WAC? How useful are they? How can their usefulness be improved?
- ⇒ Should communication criteria for health related school closures and remediation actions be included in WAC 246-366?
- ⇒ Should communication criteria for health related school closures and remediation actions be included in the DOH-OSPI K-12 Health and Safety Guide?

5. The frequency and scope of inspections.

A DOH survey of LHDs found that approximately 25% of schools in the state are never given a comprehensive inspection per WAC 246-366. No LHDs conduct comprehensive inspections more often than once a year. Approximately 90% of LHDs indicated they had conducted issue specific inspections -- most frequent were food service inspections and responses to complaints.

The DOH survey also found that the number of FTE's committed statewide is limited – designated school program staff made up a total of 7 FTEs, of approximately 450 EH staff at LHDs (less than 2% of LHD EH staffing).

- ⇒ Should inspection guidelines reference the DOH-OSPI K-12 Health and Safety Guide? Should there be additional inspection scope and frequency recommendations, or requirements?

6. A timeline and outline for any rule updates or revisions recommended in the rule review.

So far I have received recommendations to revise and update WAC 246-366, from the DOH 1998 rule review, LHD and SD staff. It's too early in the process to propose a timeline.

⇒ Should the WAC 246-366 be revised? If yes, are there recommendations for a draft timeline for the rule revision?

Additional related recommendations:

1. Create a regional or state school program for school plan reviews and inspections.

There's an increasing need for more specialized knowledge and expertise, but capacity to have adequately trained staff is limited in some smaller local health departments. This results in limited value to the schools when these LHDs do plan reviews and inspections.

Public Health-Seattle & King County, a large LHD, sent in examples of their contribution to school environmental health through:

- Investigation of source of student and staff complaints, identification of problems, and recommendations (that solved problems)
- Coordination of communication with public and school district staff
- Encouraging documentation of health complaints, by school nurse and other staff.
- Improving school nurse's knowledge of school EH related events
- During preoccupancy inspection incorrect product use was identified, which had caused health complaints among staff who had moved in early.
- Investigation of student complaints, identification of problems, maintenance recommendations and follow-up (that solved problems)

A 1996 DOH survey found that 19 of 32 LHDs with approximately 25% of the state's schools were not implementing WAC 246-266 safety and facility components, such as inspections. The survey identified barriers to implementation, ranked with the most important first:

- lack of staff resources
- lack of revenue base
- lack of cooperation from school districts
- lack of political support

3. Cooperative or regulatory approach to rule implementation?

The DOH rule review reports two perspectives from the regulated community:

- 1) They want a cooperative approach where LHDs advise them about how they can improve school safety
- 2) They cannot afford to comply with "recommendations" no matter how sound. Budgets and resources are tight, there are significant competing interests, and unless they are required to comply, the resource managers

cannot justify shifting available resources to comply with a recommendation.

4. Use soil contamination data in school site approvals.

Department of Ecology has information on lead and arsenic contamination, and hazardous waste clean up sites and programs that should be considered when siting schools and playgrounds, and in examining impacts on school environmental health.

5. Proper disposal of school laboratory chemicals

Department of Ecology and the Environmental Protection Agency fund local governments to assist proper waste management of school lab chemicals.

6. Track pesticide use on and near school grounds.

Department of Ecology tracks pesticide use on and near schools, but doesn't have the resources or specific rules or statutes to more than track this information. Schools and their communities could use this information to improve pesticide use policies, thereby improving school environmental health.

7. Send letters and emails to all concerned parties (schools) informing them that DOH-OSPI k-12 School Health and Safety Guide is the current reference in Washington State.

Draft review of 246-366 WAC:

Should the rule be revised? Recommendations:

- rule needs to be revised to comply with all of the related codes that have already been revised
- review entire regulation since many of the sections relate to a balanced IAQ environment.

Brief comments from Jim Kerns & DOH related to each section:

001. O.K.

No change.

010. Check with OSPI regarding the definition of "school." The wording relating to "Home schools" may need to be modified.

New definition will be needed with new sections added.

020. "Substitutions" is a correct word to use. "Alternate materials and methods" is what the UBC and UFC use. Do not allow anyone to insert the word "variance" into this section. Note: The State may adopt different Building and Fire codes in the very near future (International Code) If so, you might want to compare that code language with this review.

No change.

030. It is unfortunate that item 1 has not been taken more seriously by many LHD's in the past. Item 3 should be reviewed and compared to the new WISHA noise regulations. It may be too lenient.

LHD site approvals are not redundant with local planning office site approvals – previous use of the property and proximate sources of are not considered by local planning offices.

(3) noise levels may not have a sufficient environmental health basis for inclusion in this rule. Amend.

040. As written, this is O.K. However, what does a LHD know about actually performing a plan review? Some do, and many do not. It is my experience that many items are overlooked by the LHD during plan review and construction and then they are in the awkward position of arguing with the school district or architect at occupancy time. I suggest a centralized location for a health and safety review of the plans by a trained professional reviewer to remedy this. Whatever the cost, it would be only a fraction of either fixing the mistakes or living with a poorly constructed building.

Preoccupancy inspection by LHD is somewhat redundant with the structural, fire, electrical, and lighting inspections conducted by other authorities. There are other items only the LHD looks for (e.g. kiln vents, student safety hazards, etc).

Amend to restrict and/or eliminate subjects that are covered by other agencies such as building and fire codes. Areas of concern are heating, ventilation, noise, and student safety.

050. This entire section needs to be re-written. Nearly every item addressed is already regulated by other codes or laws.

(8) window requirements may not have a sufficient environmental health basis for inclusion in this rule.

Revise full section. The OSPI facility manual needs to be referenced or incorporated.

060. Refer to the Plumbing Code and the Building Code and DOH Drinking

Water regulations.

Shower requirements may not have a sufficient environmental health basis for inclusion in this rule.

Delete but reference to regs.

070. Several of the sections should be written exactly as this one. Refer to the appropriate code.

Delete but reference to regs.

080. Needs a complete re-write in coordination with the Building Code, the Ventilation Code (WAC 51-13) and the ASHRAE Standard that has been adopted by the State. (RCW 19.27) What "contaminate" would be acceptable?

Define "contaminants of public health concern."

Incorporate into new IAQ section. Reference in IAQ manual.

090. Heating, Ventilation and Temperature should be combined into one section.

Redundant with Energy Code implemented by local building officials.

Incorporate into new IAQ section.

100. (See comments in 090)

Automatic temperature control requirement may not have a sufficient environmental health basis for inclusion in this rule.

Incorporate into new IAQ section.

110. O.K. (unless WISHA changes the requirements for employees.) This should always shadow WISHA regulations since WISHA needs to be met for the employees.

No change. Reference L & I.

120. O.K. except some of the need lighting available might not fit neatly into these categories. Check with the Lighting Lab regarding an update.

Revise and update.

130. O.K. Refer to food safety regulations.

Delete but reference to regs.

140. This needs a complete re-write. The K-12 Health and Safety Guide (January 2003) should be referenced and used as a guide for the re-write.

Rewrite section, identify and define “unsafe conditions” and “potential hazard” – incorporate DOH-OSPI School Safety Guide into the rule, for specific requirements and recommendations.

Amend and expand. Incorporate guidelines.

150. O.K. if you need it.

No change.

Some other relevant statutes and rules:

See rules referenced above, also.

⇒ What additional relevant statutes and rules should I research?

RCW 70.162, indoor air quality in public buildings:

- Directs L&I to review indoor air quality programs in public schools administered by the SPI and the DSHS.
- Directs the state building code council to review state building code to determine adequacy of current mechanical ventilation and filtration standards
- Says the SPI may implement a model indoor air quality program in a school district selected by the superintendent.

RCW 19.27 state building code and **WAC 51**, ventilation and indoor air quality, energy code, and building code guidelines.

WAC 180-26-020 requires that the superintendent of public instruction and the school districts conduct reviews and evaluations of new sites for new and existing state assisted projects. This includes consideration of students' health and safety.

WAC 180-27-080 requires value engineering studies, constructability reviews, and building commissioning for projects larger than fifteen thousand square feet but less than fifty thousand square feet.

Building commissioning is defined as the process of verifying that the installation and performance of selected building systems meet or exceed the specified design criteria and therefore satisfy the design intent. Building commissioning shall include a physical inspection, functional performance testing, listing of noted deficiencies, and a final commissioning report.

Building commissioning shall be performed by a professional agent or authority not contractually or otherwise financially associated with the project design team or contractor. A district shall be eligible for state assistance for a value engineering study, a constructability review, and building commissioning for each qualifying project.

WAC 180-27-535 requires school district boards to evaluate existing building conditions and report these evaluations to OSPI as a condition of receiving state construction assistance.

WAC 180-27-605 Emergency repair grant applications -- Contents of applications. The state board of education may allocate any funds specifically appropriated for this purpose by the legislature to school districts for emergency repair projects for school buildings which present imminent health and safety hazards for building occupants in accordance with process and eligibility criteria.

One criteria is authorization of emergency repairs:

Certification by a health officer, fire official, building official, labor and industries official, or other independent and competent authority that an imminent health and safety hazard to building occupants of a specified nature and extent exists unless the emergency repairs are made.

Some resources:

The DOH-OSPI K-12 Health and Safety Guide and other relevant information is available at <http://www.doh.wa.gov/ehp/ts/school.htm>.

The Collaborative for High Performance Schools has many interesting documents, available online at <http://www.chps.net/>.

EPA's [National Best Practices Manual For Building High Performance Schools](http://cfpub.epa.gov/schools/index.cfm) and other useful documents are available online at <http://cfpub.epa.gov/schools/index.cfm>.